

	Type	L #	Hits	Search Text	DBs	Time Stamp	C o m m e n t s	E r r o r s	E r r o r s
1	BRS	L15	150	(ammonia or NH3) and (CF4 or C4F8 or C4F6 or C5F8 or C2F6 or C3F8 or CHF3 or CH2F2)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/18 20:06			0
2	BRS	L22	110	15 and @pd<=20001210	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/18 20:18			0
3	BRS	L29	0	22 and 252/\$cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/18 20:07			0
4	BRS	L36	1	22 and 252/\$.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/18 20:08			0
5	BRS	L43	22	22 and 438/\$.cccls.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/18 20:17			0
6	BRS	L50	9	(CF4 with CHF3 with CH2F2) with etch\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/18 20:18			0
7	BRS	L57	6	50 and @pd<=20001210	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/18 20:23			0
8	BRS	L64	88	22 not 43	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/18 20:23			0

CLIPPEDIMAGE= JP02000294537A

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TITLE: ETCHING DEVICE AND METHOD THEREFOR

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ABSTRACT:

PROBLEM TO BE SOLVED: To provide an etching device and method for obtaining the sidewall of a silicon nitride film, having film thickness and height sufficient for electrical insulation at the sidewall part of a pattern having a step in level.

SOLUTION: A silicon nitride film 5 is etched by using the plasma of a mixed gas, containing at least one of CF<sub>4</sub> and CHF<sub>3</sub> and CH<sub>2</sub>F<sub>2</sub> in a discharge

chamber

separation type dry etching device, so that a sidewall 7 of a silicon nitride film 5 can be left on the sidewall of a pattern to be self-aligned, and the silicon nitride film 5 at the bottom part of the pattern can be removed. Also, the silicon nitride film 5 of a memory cell part is removed, and simultaneously the silicon layer and metallic silicide layer or the like of a peripheral circuit part in the same substrate surface as the memory cell part are etched also.

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